

1 **M R S S O S** - - - - **T L E R S E O O T R A A S S L E E L L R** VEGF-D
 1 **M N F L L S** W V H W S **L A** - - - - - **L L L** h VEGF 165

 27 **I T H S E D W K L W R C R L R L K S F T S M D S R S A S H R** VEGF-D
 17 Y L **H H A K W** S - - - - - Q A A P M A E G G G Q N **H H** h VEGF 165

 57 **S T** - **R F A A T F Y D L E T L K V I D E E W Q R T O C S P R** VEGF-D
 39 E V V K **F M D V Y** - - - - - **Q R S Y C H P I** h VEGF 165

 86 **E T C V E V A S E L G K S T N T F F K P P C V N V F R C G G** VEGF-D
 56 **E T L V D I F Q E Y P D E I E Y I F K P S C V P L M R C G G** h VEGF 165

 116 **C C N E E S L I C M N T S T S Y I S K Q L F E I S V P L T S** VEGF-D
 86 **C C N D E G L E C V P T E E S N I T M O I M R I K P** - - H Q h VEGF 165

 145 **V P E L V P V K V A N H T G C K C L P T A P R H P Y S I I R** VEGF-D
 114 G Q H I G E M S F L Q **H N K C E C R P K K D R** - - - - - h VEGF 165

 176 **R S I O I P E E D R C S H S K K L C P I D M L W D S N K C K** VEGF-D
 137 - - - - A R Q **E N P C G P C** - - - - - h VEGF 165

 206 **C V L O E E N P L A G T E D H S H L O E P A L C G P H M M F** VEGF-D
 147 - - - - - **S E R R K H L** - - - - - h VEGF 165

 236 **D E D R C E C V C K T P C P K D L I Q H P K N C S C F E C K** VEGF-D
 154 - - - - - F V **O D P Q T C K C** - **S C K** h VEGF 165

 266 **E S L E T C C O K H K L F H P D T C S C E D R C P F H T H P** VEGF-D
 167 N T D S R **C K A R Q L E L N E R T C R C D** - - - - - h VEGF 165

 296 **C A S G K T A C A K H C R F P K E K R A A O G P H S R K N P** VEGF-D
 188 - - - - - K P R R h VEGF 165

FIG. 1A

1 MRSSOSTLERSEOOIRAASSLEELLRITHS VEGF-D
 1 MSPLLRRL-----LLAALLQLAPAh VEGF-B
 31 EDWKLWRCRLRLKSFTSMDSRSASHRSTRF VEGF-D
 20 QA-----PVSQPDAPGHQRKVVSWh VEGF-B
 61 AATFYDIETLKVIDEEWORTOCSPRETCVE VEGF-D
 39 IDVY-----TRATCQPREVVVP h VEGF-B
 91 VASELGKSTNTFFKPPCVNVFRCGGCCNEE VEGF-D
 56 LTVELMGTVAKQLVPSCVTVQRCGGCCPD h VEGF-B
 121 SLICMNTSTSYISKQLFEISVPLTSVPELV VEGF-D
 86 GLECVPTIGQHQVRMQILMIRYPSSQLGEM - h VEGF-B
 151 PVKVANHTGCKCLPTAPRHPYSITRRSIOI VEGF-D
 115 --SLEEHSQCRCRPK-----KKDSAVh VEGF-B
 181 PEEDRCSHKKLCPIDMLWDSNKKCVLOE VEGF-D
 134 KPDS----PRPLCP-----RCTQH h VEGF-B
 211 ENPLAGTEDHSHLOEPALCGPHMMFDEDRC VEGF-D
 150 QRP-----DPRTC h VEGF-B
 241 ECVCKTPCPKDLIOHPKNCSCFECKESLET VEGF-D
 158 RCRCRR---RSFLR----- h VEGF-B
 271 CCQKHKL-FHPDTCSCEDRCPFHTRPCASG VEGF-D
 169 -COGRGLELNPDRCRC----- h VEGF-B
 300 KTACAKHCRFPKEKRAAOGPHSRKNP VEGF-D
 184 -----RKLRR h VEGF-B

FIG. 1B

1	M R S S O S T L E R S E O O I R A A S S L E E L L R I T H S	VEGF-D
1	M T - - - - - V L Y P	VEGF-C
31	E D W K L W R C R L R - - - - - L K S F T S M D S R S A S	VEGF-D
7	E Y W K M Y K C Q L R H G G W Q H N R E Q A N L N S R T E E	VEGF-C
55	H R S T R F A A T F Y D I E T L K V I D E E W O R T Q C S P	VEGF-D
37	- - T I K F A A A H Y N T E I L K S I D N E W R K T O C M P	VEGF-C
85	R E T C V E V A S E L G K S T N T F F K P P C V N V F R C G	VEGF-D
65	R E V C I D V G K E F G V A T N T F F K P P C V S V Y R C G	VEGF-C
115	G C C N E E S L I C M N T S T S Y I S K Q L F E I S V P L T	VEGF-D
95	G C C N S E G L Q C M N T S T S Y L S K T L F E I T V P L S	VEGF-C
145	S V P E L V P V K V A N H T G C K C L P T A P - - R H P Y S	VEGF-D
125	Q G P K P V T I S F A N H T S C R C M S K L D V Y R Q V H S	VEGF-C
173	I I R R S T O I P E E D R C S H S K K L C P I D M L W D S N	VEGF-D
155	I I R R S L P A T L P Q - C Q A A N K T C P T N Y M W M M H	VEGF-C
203	K C K C V L Q E E - - - N P L A G T E D - - - - -	VEGF-D
184	I C R C L A O E D F M F S S D A G D D S T D G F H D I C G P	VEGF-C
220	H S H L O E - - - - -	VEGF-D
214	N K E L D E E T C Q C V C R A G L R P A S C G P H K E L D R	VEGF-C
226	- - - - - P A L C G P H M M F D E D R C E C V	VEGF-D
244	N S C Q C V C K N K L F P S Q C G A N R E F D E N T C Q C V	VEGF-C
244	C K T P C P K D L L O H P K N C S C F E C K E S L E T C C O	VEGF-D
274	C K R T C P R N Q P L N P G K C A C - E C T E S P Q K C L L	VEGF-C
274	K H K L F H P D T C S C E D R C P F H T R P C A S G K T A C	VEGF-D
303	K G K K F H H Q T C S C - - - - - Y R R P C T N R Q K A C	VEGF-C
304	A K H C R F P K E K - R A A O G P H S R K N P .	VEGF-D
327	E P G F S Y S E E V C R C V P S Y W K R R Q M S	VEGF-C

FIG. 1C

1	MRSSO	-----	STLERSEOOIRAASSL	VEGF-D
1	MPVMRLFPCFLQLLAGL	A-----		hPIGF
22	EELLRITHSEDWKLWRCRLRLKSFTSMDSR			VEGF-D
19	---	LPAVPPQQWAL	-----	hPIGF
52	SASHRSTRFAATFYDIETLKVIDEEWORTO			VEGF-D
30	SAGNGSS	-----	EVVP-FQEVWGRSY	hPIGF
82	CSPRETCVEVASELGKSTNTFFKPPCVNVF			VEGF-D
52	CRALEERLV	DVVSEYPSEVEHMFSPSCV	SLL	hPIGF
112	RCGGCCBEESLICMNTSTSYISKQLFEISV			VEGF-D
82	RC	TGCCGDENLHCVPVETANVTMOLLKIR	S	hPIGF
142	PLTSVPPELVPVKVANHTGCKCLPTAPRHPY			VEGF-D
112	---	GDRPSYVELTFSQHVRCECRP	-----	hPIGF
172	SIIRRSIOIPEEDRCSHKKLCPIDMLWDS			VEGF-D
133	---	LEKMK-PERRR	-----	hPIGF
202	NKCKCVLOEENPLAGTEDHSHLOEPALCGP			VEGF-D
144	-----			hPIGF
232	HMMFDEDRCECVCKTPCPKDLIOHPKNCSC			VEGF-D
144	-----			hPIGF
262	FECKESLETCCOKHKLHPDTCSCEDRCPF			VEGF-D
144	-----			hPIGF
292	ETRPCASGKTACAKHCRFPKEKRAAQGP			VEGF-D
144	-----	PKGRG	-----	KRRREKQRPTD hPIGF
320	-----	RSRKNP		VEGF-D
160	CHLCGDAVPRR			hPIGF

FIG. 1D

1 MRSSOSTLERSEOOIHAASSLEELLRITHS VEGF-D
1 MT-----VLYP VEGF-C
1 MS-----PL-----h VEGF-B
1 M-----NFLLS h VEGF 165
1 MP-----VMRLFPChPIGF

31 EDWELWRCHLR LKSF-----TSMDSRSA VEGF-D
7 EYWKMYKCOLRKGGWQH-NREQANLNSRT- VEGF-C
5 -----LRRLLLAALLQLAPAQAPVSQPD h VEGF-B
7 --WVWWSLALL- YLHHA KWSQAAPMAEGCh VEGF 165
10 --FLQLLAGLALPAVPPQQWA-----LSAGN hPIGF

54 SHRSTRFAATGYDIETLKVIDEEQORTOCS VEGF-D
35 -EETIKFAAAKYNTETLKSIDNEWKRKTOCM VEGF-C
29 PGH-----QRKVVS WIDV-YTRATCQ h VEGF-B
34 GQN-----HHEVVKFMDV-YQRSYCH h VEGF 165
34 GSS-----EVEVVPFQEV-WGRSYCR hPIGF

84 PRETCVEVASELCKSTNTFPKPPCVNVFRC VEGF-D
64 PREVCIDVCKEFGVATNTPPKPPCVSVYRC VEGF-C
49 PREVVVPLTVELMGTVAEQLVPSCVTVQRC h VEGF-B
54 PIETLVDFIQEYPDEIEYIFKPSCVPLMRCh VEGF 165
54 ALERLVDDVSEYPSEVEHMFSPSCVSLLRChPIGF

114 GCCCNEESLICMNTSTSYISKQLFEISCPL VEGF-D
94 GGCCNSEGLQCMNTSTSYLSKTLFEITVPL VEGF-C
79 GGCCPDDGLECVPRGQHQRVMQILMIR---h VEGF-B
84 GGCCNDEGLECVPTTEESNITMQIMRIKP---h VEGF 165
84 TGCCGDENLHCVPVETANVTMQLLKIR---hPIGF

144 TSVPELVVPVKVANETGCKCLPTAP--RHPY VEGF-D
124 SQGPKPVTISFANHSTSCRCMSKLDVYRQVH VEGF-C
106 YPSSQLGEMSL EEHSQCEC-----h VEGF-B
112 HQGQHIGEMSFLQH NKCEC-----h VEGF 165
112 GDRPSYVELTFSQHVRCEC-----hPIGF

172 SIIRRS LQLPEEDRCSH SKKLCPIDMLWDS VEGF-D
154 SIIRRS LPAATLPQCQAANKTCPTNYMQNN VEGF-C
125 ----RPPKKKDS AVKPDSPRPLCP-----h VEGF-B
131 ----RPPKKDR--ARQENP--CG-----h VEGF 165
131 ----RLPREK--MK-----hPIGF

FIG. 2A

202	NKCKCVLQEENPLAGTED	-----	VEGF-D
183	NI	CRCLAQEDFMFSSDAGDDSTDGFHDIC	VEGF-C
144	---	RC	TQRKQR---P-----h VEGF-B
145	---	PC	SERRKELFVQ-----h VEGF 165
139	---	PERRRP	-----hPIGF
220	-	HSHLQE	-----VEGF-D
213	PNKE	LD	ETCQCVCRACLRPA SC CPHKELD VEGF-C
153	-----		D VEGF-B
157	-----		D h VEGF 165
145	-----		hPIGF
226	-----	PALCGPHMMFDEDRCEC	VEGF-D
243	RNSCQCVCCKNKP	FSQCCANREFDENTCQC	VEGF-C
154	PRTCRCRCRRRSF	-----	h VEGF-B
158	PQTCCKCCKNTD	-----	h VEGF 165
145	-----	KGRC	-----hPIGF
243	VCKTPCPKDLIOHPKNCSCFECKESLETCC		VEGF-D
273	VCK	RTCPRNQPLNPGKCACTES	PQKCL VEGF-C
167	-----		LR C Q h VEGF-B
170	-----		SR C K h VEGF 165
149	-----		KRRR hPIGF
273	QKHKLPHPOTCSCEDR	CPFHTRPCASCKT	VEGF-D
302	L	KGK	KFHQTCSCYRPPCTNRQKACEPGFS VEGF-C
171	GRGLRLNP	DTCRC	-----h VEGF-B
174	ARQLELNERT	CRC	-----h VEGF 165
153	E	KQRP	TDCHLCGD-----hPIGF
302	ACAKHCRFPKEYRAAOGPMSRKNP		VEGF-D
332	YSEEV	CR	CVPSYW-----KRROMS VEGF-C
184	-----		RKLRR h VEGF-B
187	-----		DKPRR h VEGF 165
166	-----		AVPRR hPIGF

FIG. 2B

10	20	30	40
MPSSQSTLERSEDDIRAASSLEELLRITHSEDWKLWRCRL			
50	60	70	80
RLKSFTSMDSRSASHRSTRFAATFYDIETLKVIDEEWQRT			
90	100	110	120
QCSPRETCVEVASELGKSTNTFFKPPCVNVFRCGGCCNEE			
130	140	150	160
SLICMNTSTSYISKQLFEISVPLTSVPELVPVKVANHTGCC			
170	180	190	200
KCLPTAPHPYSIIRRSIQIPEEDRCSHKKLCPIDMLWD			
210	220	230	240
SNKCKCVLQEEENPLAGTEDHSHLQEPALCGPHMMFDEDRC			
250	260	270	280
ECVCKTPCPKDLIQHPKNCSCFECKESLETCCQKHKL FHP			
290	300	310	320
DTCSCEDRCPFHTRPCASGKTACAKHCRFPKEKRAAQGPH			
SRKNP			

FIG.3

FIG. 4

GTTGGGTTCAGCTTTCTGTAGCTGTAAGCATTGGTGGCCACACCACCTCCTTACAA
AGCAACTAGAACCTGCGGCATACATTGGAGAGATTTTTTTAATTTTCTGGACATGAA
GTAAATTTAGAGTGCTTTCTAATTTTCAGGTAGAAGACATGTCCACCTTCTGATTATT
TTTGGAGAACATTTTGATTTTTTTCATCTCTCTCTCCCCACCCCTAAGATTGTGCAA
AAAAAGCGTACCTTGCCTAATTGAAATAATTTTCATTGGATTTTGATCAGAACTGATT
ATTTGGTTTTCTGTGTGAAGTTTTGAGGTTTCAAACCTTCCTTCTGGAGAATGCCTT
TTGAAACAATTTTCTCTAGCTGCCTGATGTCAACTGCTTAGTAATCAGTGGATATTG
AAATATTCAAAATGTACAGAGAGTGGGTAGTGGTGAATGTTTTTCATGATGTTGTACG
TCCAGCTGGTGCAGGGCTCCAGTAATGAACATGGACCAGTGAAGCGATCATCTCAGT
CCACATTGGAACGATCTGAACAGCAGATCAGGGCTGCTTCTAGTTTGGAGGAACCTAC
TTCGAATTACTCACTCTGAGGACTGGAAGCTGTGGAGATGCAGGCTGAGGCTCAAAA
GTTTTACCAGTATGGACTCTCGCTCAGCATCCCATCGGTCCACTAGGTTTGCGGCAA
CTTTCTATGACATTGAAACACTAAAAGTTATAGATGAAGAATGGCAAAGAACTCAGT
GCAGCCCTAGAGAAACGTGCGTGGAGGTGGCCAGTGAGCTGGGGAAGAGTACCAACA
CATCTTCAAGCCCCCTTGTGTGAACGTGTTCCGATGTGGTGGCTGTTGCAATGAAG
AGAGCCTTATCTGTATGAACACCAGCACCTCGTACATTTCAAACAGCTCTTTGAGA
TATCAGTGCCTTTGACATCAGTACCTGAATTAGTGCCTGTTAAAGTTGCCAATCATA
CAGGTTGTAAGTGCTTGCCAACAGCCCCCGCCATCCATACTCAATTATCAGAAGAT
CCATCCAGATCCCTGAAGAAGATCGCTGTTCCCATTTCCAAGAACTCTGTCTATTG
ACATGCTATGGGATAGCAACAAATGTAAATGTGTTTTGCAGGAGGAAAATCCACTTG
CTGGAACAGAAGACCACTCTCATCTCCAGGAACCAGCTCTCTGTGGGCCACACATGA
TGTTTGACGAAGATCGTTGCGAGTGTGTCTGTAAAAACACCATGTCCCAAAGATCTAA
TCCAGCACCCCAAAAACCTGCAGTTGCTTTGAGTGCAAAGAAAGTCTGGAGACCTGCT
GCCAGAAGCACAAAGCTATTTACCCAGACACCTGCAGCTGTGAGGACAGATGCCCCCT
TTCATAACCAGACCATGTGCAAGTGGCAAACAGCATGTGCAAAGCATTGCCGCTTTC
CAAAGGAGAAAAGGGCTGCCAGGGGGCCCCACAGCCGAAAGAATCCTTGATTCAGCG
TTCCAAGTTCCCCATCCCTGTCATTTTTAACAGCATGCTGCTTTGCCAAGTTGCTGT
CACTGTTTTTTTCCCAGGTGTTAAAAAAAATCCATTTTACACAGCACCACAGTGA
ATCCAGACCAACCTTCCATTCACACCAGCTAAGGAGTCCCTGGTTCATTGATGGATG
TCTTCTAGCTGCAGATGCCTCTGCGCACCAAGGAATGGAGAGGAGGGGACCCATGTA
ATCCTTTTGTGTTAGTTTTGTTTTTGTGTTTTTGGTGAATGAGAAAGGTGTGCTGGTCA
TGGAATGGCAGGTGTCATATGACTGATTACTCAGAGCAGATGAGGAAAACCTGTAGTC
TCTGAGTCCTTTGCTAATCGCAACTCTTGTGAATFATTCTGATTCTTTTTTATGCAG
AATTTGATTCGTATGATCAGTACTGACTTTCTGATTACTGTCCAGCTTATAGTCTTC
CAGTTTAATGAAC TACCATCTGATGTTTCATATTTAAGTGTATTTAAAGAAAATAAA
CACCATTATTCAAGCCAAAAAATAAAAAA

MYREWVVNVFMMLYVQLVQGSSNEHGPVKRSSQSTLERSEQQIRAASSLEELLRIT
HSEDWKLWRCRLRLKSFTSMDSRSASHRSTRFAATFYDIETLKVIDEEWQRTQCSPR
ETCVEVASELGKSTNTFFKPPCVNVFRCGGCCNEESLICMNTSTSYISKQLFEISVP
LTSVPELVPVKVANHTGCKCLPTAPRHPYSIIRRSIQIPEEDRCSHSHKKLCPIDMLW
DSNKCKCVLQEENPLAGTEDHSHLQEPALCGPHMMFDEDRCECVCKTPCPKDLIQHP
KNCSCFECKESLETCCQKHKLFHPDTCSCEDRCPFHTRPCASGKTACAKHCRFPKEK
RAAQGPHSRKNP

FIG. 5

FIG. 6

GGAGAATGCCTTTTGCAACACTTTTCAGTAGCTGCCTGGAAACAACTGCTTAGTCAT
CGGTAGACATTTAAAATATTCAAAATGTATGGAGAATGGGGAATGGGGAATATCCTC
ATGATGTTCCATGTGTACTTGGTGCAGGGCTTCAGGAGCGAACATGGACCAGTGAAG
GATTTTTCTTTTGAGCGATCATCCCGTCCATGTTGGAACGATCTGAACAACAGATC
CGAGCAGCTTCTAGTTTGGAGGAGTTGCTGCAAATCGCGCACTCTGAGGACTGGAAG
CTGTGGCGATGCCGGTTGAAGCTCAAAAGTCTTGCCAGTATGGACTCACGCTCAGCA
TCCCATCGCTCCACCAGATTTGCGGCAACTTTCTATGACACTGAAACACTAAAAGTT
ATAGATGAAGAATGGCAGAGGACCCAATGCAGCCCTAGAGAGACATGCGTAGAAGTC
GCCAGTGAGCTGGGGAAGACAACCAACACATTCTTCAAGCCCCCTGTGTAAATGTC
TTCCGGTGTGGAGGCTGCTGCAACGAAGAGGGTGTGATGTGTATGAACACAAGCACC
TCCTACATCTCCAAACAGCTCTTTGAGATATCAGTGCCTCTGACATCAGTGCCCGAG
TTAGTGCCTGTAAAAATTGCCAACCATACGGGTTGTAAGTGCTTGCCCACGGGCCCC
CGCCATCCTTACTCAATTATCAGAAGATCCATTCAGACCCCAGAAGAAGATGAATGT
CCTCATTCCAAGAACTCTGTCTTATTGACATGCTGTGGGATAACACCAAATGTAAA
TGTGTTTTTGCAAGACGAGACTCCACTGCCTGGGACAGAAGACCACTCTTACCTCCAG
GAACCCACTCTCTGTGGACCGCACATGACGTTTGATGAAGATCGCTGTGAGTGCCTC
TGTAAGCACCATGTCCGGGAGATCTCATTCAGCACCCGGAAAACCTGCAGTTGCTTT
GAGTGCAAAGAAAGTCTGGAGAGCTGCTGCCAAAAGCACAAAGATTTTTTACCCAGAC
ACCTGCAGCTGTGAGGACAGATGTCCTTTTCACACCAGAACATGTGCAAGTAGAAAG
CCAGCCTGTGGAAAGCACTGGCGCTTTCCAAAGGAGACAAGGGCCCAGGGACTCTAC
AGCCAGGAGAACCCTTGATTCAACTTCCTTTCAAGTCCCCCATCTCTGTCATTTTA
AACAGCTCACTGCTTTGTCAAGTTGCTGTCACTGTTGCCCACTACCCCTTGAACATG
TGCAAACACAGACACACACACACACACACAGAGCAACTAGAATTATGTTTTCT
AGGTGCTGCCTAAG

FIG. 7

AAACTTTGCTTCTGGAGAATGCCTTTTGCAACACTTTTCAGTAGCTGCCTGGAAACA
ACTGCTTAGTCATCGGTAGACATTTAAAATATTCAAAATGTATGGAGAATGGGGAAT
GGGGAATATCCTCATGATGTTCCATGTGTACTTGGTGCAGGGCTTCAGGAGCGAACA
TGGACCAGTGAAGCGATCATCCCGGTCCATGTTGGAACGATCTGAACAACAGATCCG
AGCAGCTTCTAGTTTGGAGGAGTTGCTGCAAATCGCGCACTCTGAGGACTGGAAGCT
GTGGCGATGCCGGTTGAAGCTCAAAAGTCTTGCCAGTATGGACTCACGCTCAGCATC
CGATCGCTCCACCAGATTTGCGGCAACTTTCTATGACACTGAAACACTAAAAGTTAT
AGATGAAGAATGGCAGAGGACCCAATGCAGCCCTAGAGAGACATGCGTAGAAGTCGC
CAGTGAGCTGGGGAAGACAACCAACACATTCTTCAAGCCCCCTGTGTAAATGTCTT
CCGGTGTGGAGGCTGCTGCAACGAAGAGGGTGTGATGTGTATGAACACAAGCACCTC
CTACATCTCCAAACAGCTCTTTGAGATATCAGTGCCTCTGACATCAGTGCCCGAGTT
AGTGCCTGTTAAAATTGCCAACCATACGGGTGTAAAGTGCTTGCCACGGGCCCCCG
CCATCCTTACTCAATTATCAGAAGATCCATTGACACCCAGAGAAGATGAATGTCC
TCATTCCAAGAACTCTGTCCTATTGACATGCTGTGGGATAACACCAAATGTAAATG
TGTTTTGCAAGACGAGACTCCACTGCCTGGGACAGAAGACCCTCTTACCTCCAGGA
ACCCACTCTCTGTGGACCGCACATGACGTTTGATGAAGATCGCTGTGAGTGCGTCTG
TAAAGCACCATGTCCGGGAGATCTCATTGACACCCGAAAACCTGCAGTTGCTTTGA
GTGCAAAGAAAGTCTGGAGAGCTGCTGCCAAAAGCACAAGATTTTTACCCAGACAC
CTGCAGGTCAATGGTCTTTTCGCTTTCCCCTTAAGTTGGTTACTGATGACATTTAA
AGGACATACTAATCTGATCTGTTTCAGGCTCTTTCTCTCAGAGTCCAAGCAC

1	MYGEWGMGNILMMFHVYLVQGF	RSEHGPVK	DFSE	SSRS	mVEGF-D1
1	MYGEWGMGNILMMFHVYLVQGF	RSEHGPVK	DFSE	SSRS	mVEGF-D2
41	MLERSEQQIRAAASSLEELLQIAHSE	DWKLWRCRLK	KLKSLA		mVEGF-D1
36	MLERSEQQIRAAASSLEELLQIAHSE	DWKLWRCRLK	KLKSLA		mVEGF-D2
81	SMDSRSASHRSTRFAATFYDTETLXVI	DEEWQRTQC	SPRE		mVEGF-D1
76	SMDSRSASHRSTRFAATFYDTETLXVI	DEEWQRTQC	SPRE		mVEGF-D2
121	TCVEVASELGKTTNTFFKPPPCVN	VFRCGGCC	NEEGVMCMN		mVEGF-D1
116	TCVEVASELGKTTNTFFKPPPCVN	VFRCGGCC	NEEGVMCMN		mVEGF-D2
161	TSTSYISKQLFHISVPLTSVPEL	VPVKIANHTG	CKCLPTG		mVEGF-D1
156	TSTSYISKQLFHISVPLTSVPEL	VPVKIANHTG	CKCLPTG		mVEGF-D2
201	PRHPYSIIRRSIQTPPEDECPH	SKKLCPI	DMLDNTKCKC		mVEGF-D1
196	PRHPYSIIRRSIQTPPEDECPH	SKKLCPI	DMLDNTKCKC		mVEGF-D2
241	VLQDETPLPGTEDHSYLQEPTLC	GGPHMTFDE	DRCECVCKA		mVEGF-D1
236	VLQDETPLPGTEDHSYLQEPTLC	GGPHMTFDE	DRCECVCKA		mVEGF-D2
281	PCPGDLIQHPENCSCFECKESLE	SCCQKHKIF	HPDTCSC		mVEGF-D1
276	PCPGDLIQHPENCSCFECKESLE	SCCQKHKIF	HPDTC	RS	mVEGF-D2
321	DRCPFHTRTCASRKPA	CGKHWRFP	KETRAOGLYS	OE	mVEGF-D1
316	-----	-----	VFSL	-SIP	mVEGF-D2

FIG.8

1	M	Y	R	E	W	V	V	N	F	M	M	L	Y	V	Q	L	V	Q	G	S	S	N	E	H	G	P	V	K	---	R	S	S	Q	S	hVEGF-D											
1	M	Y	G	E	W	G	M	G	N	I	L	M	M	F	H	V	Y	L	V	Q	G	F	R	S	E	H	G	P	V	K	D	F	S	F	E	R	S	S	R	S	mVEGF-D1					
1	M	Y	G	E	W	G	M	G	N	I	L	M	M	F	H	V	Y	L	V	Q	G	F	R	S	E	H	G	P	V	K	---	R	S	S	R	S	mVEGF-D2									
36	T	L	E	R	S	E	Q	Q	I	R	A	A	S	S	L	E	E	L	R	I	T	H	S	E	D	W	K	L	W	R	C	R	L	R	L	K	S	F	T	hVEGF-D						
41	M	L	E	R	S	E	Q	Q	I	R	A	A	S	S	L	E	E	L	Q	I	A	H	S	E	D	W	K	L	W	R	C	R	L	K	L	K	S	L	A	mVEGF-D1						
36	M	L	E	R	S	E	Q	Q	I	R	A	A	S	S	L	E	E	L	Q	I	A	H	S	E	D	W	K	L	W	R	C	H	L	K	L	K	S	L	A	mVEGF-D2						
76	S	M	D	S	R	S	A	S	H	R	S	T	R	F	A	A	T	F	Y	D	I	E	T	L	K	V	I	D	E	E	W	Q	R	T	Q	C	S	P	R	E	hVEGF-D					
81	S	M	D	S	R	S	A	S	H	R	S	T	R	F	A	A	T	F	Y	D	T	E	T	L	K	V	I	D	E	E	W	Q	R	T	Q	C	S	P	R	E	mVEGF-D1					
76	S	M	D	S	R	S	A	S	H	R	S	T	R	F	A	A	T	F	Y	D	T	E	T	L	K	V	I	D	E	E	W	Q	R	T	Q	C	S	P	R	E	mVEGF-D2					
116	T	C	V	E	V	A	S	E	L	G	K	S	T	N	T	F	F	K	P	P	C	V	N	V	F	R	C	G	G	C	C	N	E	E	S	L	I	C	N	M	hVEGF-D					
121	T	C	V	E	V	A	S	E	L	G	K	R	R	N	R	F	F	K	P	P	C	V	N	V	F	R	C	G	G	C	C	N	E	E	G	V	M	C	M	N	mVEGF-D1					
116	T	C	V	E	V	A	S	E	L	G	K	R	R	N	R	F	F	K	P	P	C	V	N	V	F	R	C	G	G	C	C	N	E	E	G	V	M	C	M	N	mVEGF-D2					
156	T	S	T	S	Y	I	S	K	Q	L	F	E	I	S	V	P	L	T	S	V	P	E	L	V	P	V	K	V	A	N	H	T	G	C	K	C	L	P	T	A	hVEGF-D					
161	T	S	T	S	Y	I	S	K	Q	L	F	E	I	S	V	P	L	T	S	V	P	E	L	V	P	V	K	T	I	A	N	H	T	G	C	K	C	L	P	T	G	mVEGF-D1				
156	T	S	T	S	Y	I	S	K	Q	L	F	E	I	S	V	P	L	T	S	V	P	E	L	V	P	V	K	I	A	N	H	T	G	C	K	C	L	P	T	G	mVEGF-D2					
196	P	R	H	P	Y	S	I	I	R	R	S	I	Q	I	P	E	E	D	R	C	S	H	S	K	K	L	C	P	I	D	M	L	W	D	S	N	K	C	K	C	hVEGF-D					
201	P	R	H	P	Y	S	I	I	R	R	S	I	Q	I	P	E	E	D	E	C	P	H	S	K	K	L	C	P	I	D	M	L	W	D	N	T	K	C	K	C	mVEGF-D1					
196	P	R	H	P	Y	S	I	I	R	R	S	I	Q	I	P	E	E	D	E	C	P	H	S	K	K	L	C	P	I	D	M	L	W	D	N	T	K	C	K	C	mVEGF-D2					
236	V	L	Q	E	N	P	L	A	G	T	E	D	H	S	H	L	Q	E	P	A	L	C	G	P	H	M	M	F	D	E	D	R	C	E	C	V	C	K	T	hVEGF-D						
241	V	L	Q	D	E	T	P	L	P	G	T	E	D	H	S	Y	L	Q	E	P	T	L	C	G	P	H	M	T	F	D	E	D	R	C	E	C	V	C	K	A	mVEGF-D1					
236	V	L	Q	D	E	T	P	L	P	G	T	E	D	H	S	Y	L	Q	E	P	T	L	C	G	P	H	M	T	F	D	E	D	R	C	E	C	V	C	K	A	mVEGF-D2					
276	P	C	P	K	D	L	I	Q	H	P	K	N	C	S	C	F	E	C	K	E	S	L	E	T	C	C	Q	J	H	K	L	F	M	P	D	T	C	S	C	E	hVEGF-D					
281	P	C	P	G	D	L	I	Q	H	P	E	N	C	S	C	F	E	C	K	E	S	L	E	S	C	C	Q	J	H	K	T	F	M	P	D	T	C	S	C	E	mVEGF-D1					
276	P	C	P	G	D	L	I	Q	H	P	E	N	C	S	C	F	E	C	K	E	S	L	E	S	C	C	Q	J	H	K	I	F	M	P	D	T	C	R	S	M	mVEGF-D2					
316	D	R	C	P	F	H	T	R	P	C	A	S	G	K	T	A	C	A	K	H	C	R	F	P	K	E	K	R	A	A	Q	G	P	H	S	R	K	N	P	hVEGF-D						
321	D	R	C	P	F	H	T	R	T	C	A	S	R	K	P	A	C	G	K	H	W	R	F	P	K	E	T	R	A	I	-	O	G	L	Y	S	Q	E	N	P	mVEGF-D1					
316	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	V	F	S	L	-	S	P	mVEGF-D2

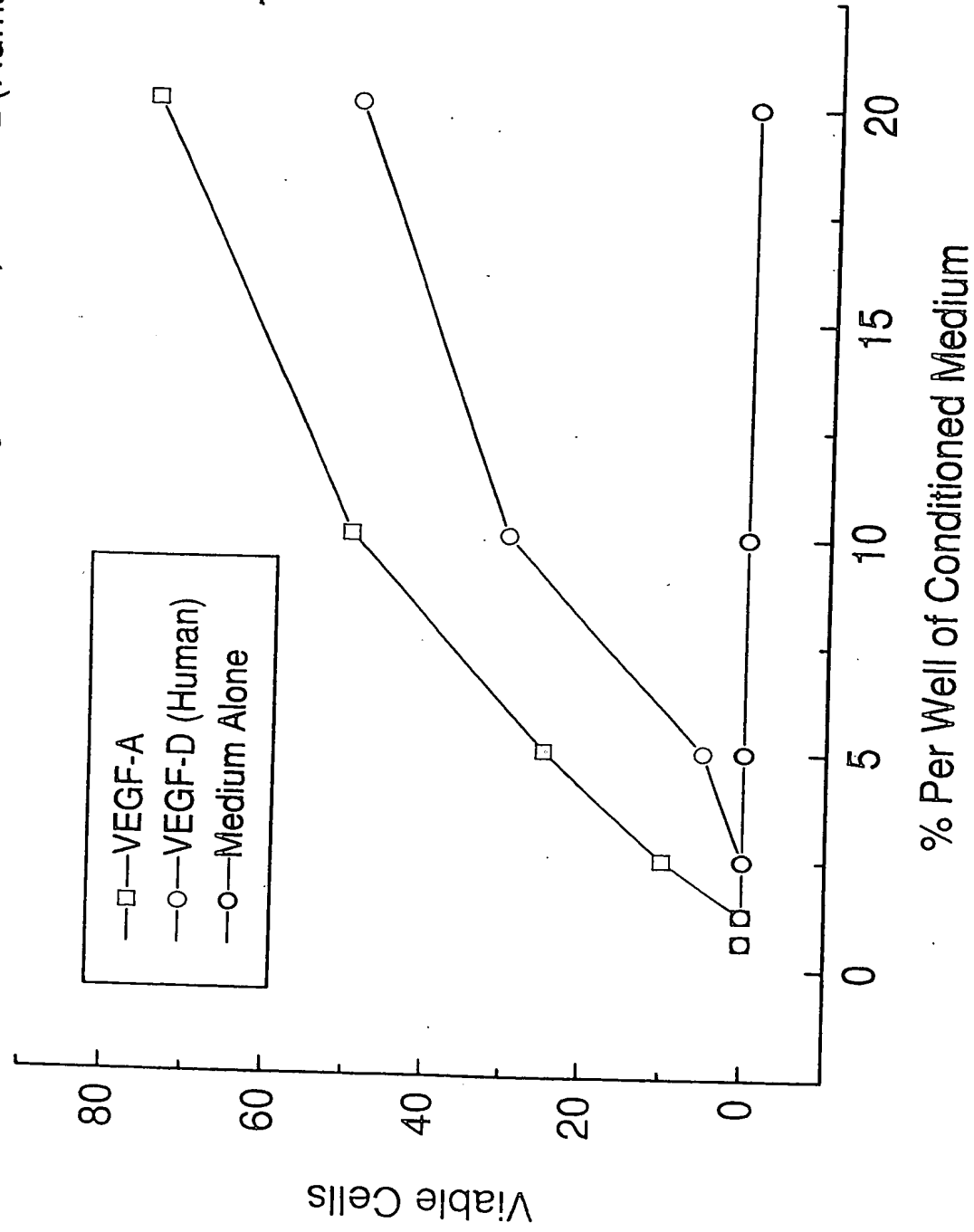
FIG. 9

1	M	Y	R	E	W	V	V	N	V	F	M	M	---	---	---	L	Y	V	O	L	V	O	G	S	S	N	E	H	G	P	V	K	---	---	---	h	V	E	G	F	-	D														
1	M	H	L	C	F	F	S	V	A	C	S	L	---	---	---	L	A	A	A	L	L	P	G	P	R	E	A	P	A	A	A	A	F	E	S	C	h	V	E	G	F	-	C													
1	M	N	F	L	---	---	---	L	S	W	V	H	W	S	L	A	L	L	Y	L	H	H	A	K	W	S	Q	A	A	P	M	A	---	---	---	h	V	E	G	F	165															
1	M	S	P	L	---	---	---	L	R	R	L	---	---	---	L	A	A	Y	L	Q	L	A	P	A	Q	A	P	V	S	Q	---	---	---	h	V	E	G	F	-	B																
1	M	P	V	M	R	L	F	P	C	F	L	Q	L	---	---	---	L	A	G	L	A	L	P	A	V	P	P	Q	Q	W	A	L	S	---	---	---	h	P	I	C	F	---														
31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	R	S	S	Q	T	L	E	R	S	E	Q	I	R	A	S	S	L	E	E	L	R	I	T	H	S	h	V	E	G	F	-	D									
36	L	D	L	S	D	A	E	P	D	A	G	E	A	T	A	Y	A	S	K	D	L	E	E	Q	L	R	S	V	S	S	V	D	E	L	M	T	V	L	Y	P	h	V	E	G	F	-	C									
31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	E	G	G	Q	N	H	E	V	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	165					
26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	P	D	A	P	G	H	Q	R	K	V	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	-	B		
31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	A	G	N	G	S	E	V	E	V	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	P	I	C	F	---				
60	E	D	W	K	L	W	R	C	R	L	R	---	---	---	L	K	S	F	T	S	M	D	S	R	S	A	S	H	R	S	T	R	F	A	A	T	F	Y	D	h	V	E	G	F	-	D										
76	E	Y	W	K	M	Y	K	C	Q	L	R	K	G	G	W	Q	H	N	R	E	Q	A	N	L	N	S	R	T	E	E	T	I	K	F	A	A	H	Y	N	h	V	E	G	F	-	C										
42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	165								
37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	-	B							
42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	P	I	C	F	---							
96	I	E	T	L	K	V	I	D	E	E	W	D	R	T	Q	C	S	P	R	E	T	C	V	E	V	A	S	E	L	G	K	S	T	N	T	F	F	K	P	P	h	V	E	G	F	-	D									
116	T	E	T	L	K	S	I	D	N	E	W	R	K	T	Q	C	M	P	R	E	V	C	I	D	V	G	K	E	F	G	V	A	T	N	T	F	F	K	P	P	h	V	E	G	F	-	C									
42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	165							
37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	-	B						
42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	P	I	C	F	---							
136	C	V	N	V	F	R	C	G	G	C	C	N	E	E	S	L	I	C	M	N	T	S	T	D	Y	I	S	K	Q	L	P	E	I	S	V	P	L	T	S	V	h	V	E	G	F	-	D									
156	C	V	S	V	Y	R	C	G	G	C	C	N	S	E	G	L	Q	C	M	N	T	S	T	S	Y	L	S	K	T	L	P	E	I	T	V	P	L	S	Q	G	h	V	E	G	F	-	C									
77	C	V	P	L	M	R	C	G	G	C	C	N	D	E	G	L	E	C	V	P	T	E	E	S	N	I	T	M	Q	I	M	R	I	K	P	---	---	---	h	Q	G	h	V	E	G	F	165									
72	C	V	T	V	Q	R	X	G	G	C	C	P	D	D	G	L	E	C	V	P	T	I	G	Q	H	Q	V	R	M	Q	I	L	M	I	R	---	---	---	Y	P	S	h	V	E	G	F	-	B								
77	C	V	S	L	L	R	C	T	G	C	C	G	D	E	N	L	H	C	V	P	V	E	T	A	N	V	T	M	Q	L	L	K	I	R	S	---	---	---	G	D	R	h	P	I	C	F	---									
176	P	E	L	V	P	V	K	V	A	N	R	T	G	C	K	C	L	P	T	A	P	---	---	---	R	H	P	Y	S	I	I	R	---	---	---	S	I	O	I	P	E	h	V	E	G	F	-	D								
196	P	K	P	V	T	I	S	F	A	N	H	T	S	C	R	C	M	S	K	L	D	V	Y	R	Q	V	H	S	I	I	R	---	---	---	S	L	P	A	T	L	h	V	E	G	F	-	C									
115	Q	H	I	G	E	M	S	F	L	Q	H	N	K	C	E	C	R	P	K	K	D	---	---	---	R	A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	165			
109	S	Q	L	G	E	M	S	L	E	E	H	S	Q	C	E	C	R	P	K	K	---	---	---	D	S	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	V	E	G	F	-	B
115	P	S	Y	V	E	L	T	F	S	Q	H	V	R	C	E	C	R	P	L	K	E	---	---	---	K	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	h	P	I	C	F	---

FIG. 10A

FIG. 11

VEGFR2 bioassay. Testing of COS cell conditioned medium containing VEGF-A, VEGF-D(Human)



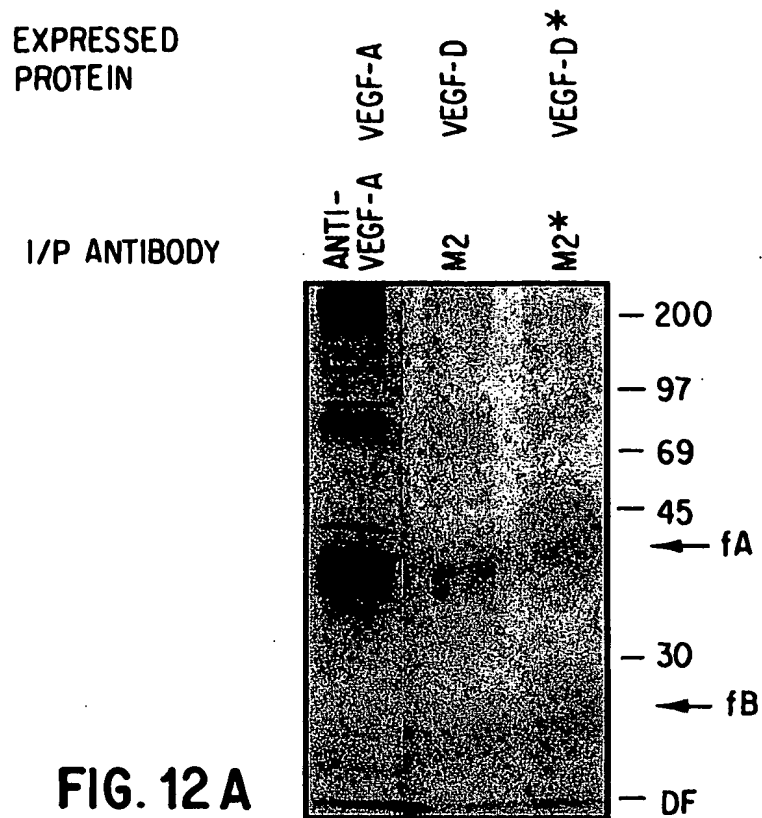


FIG. 12 A

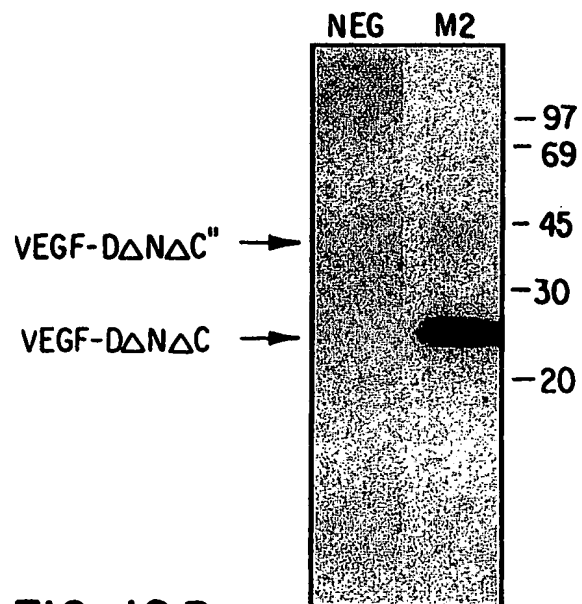
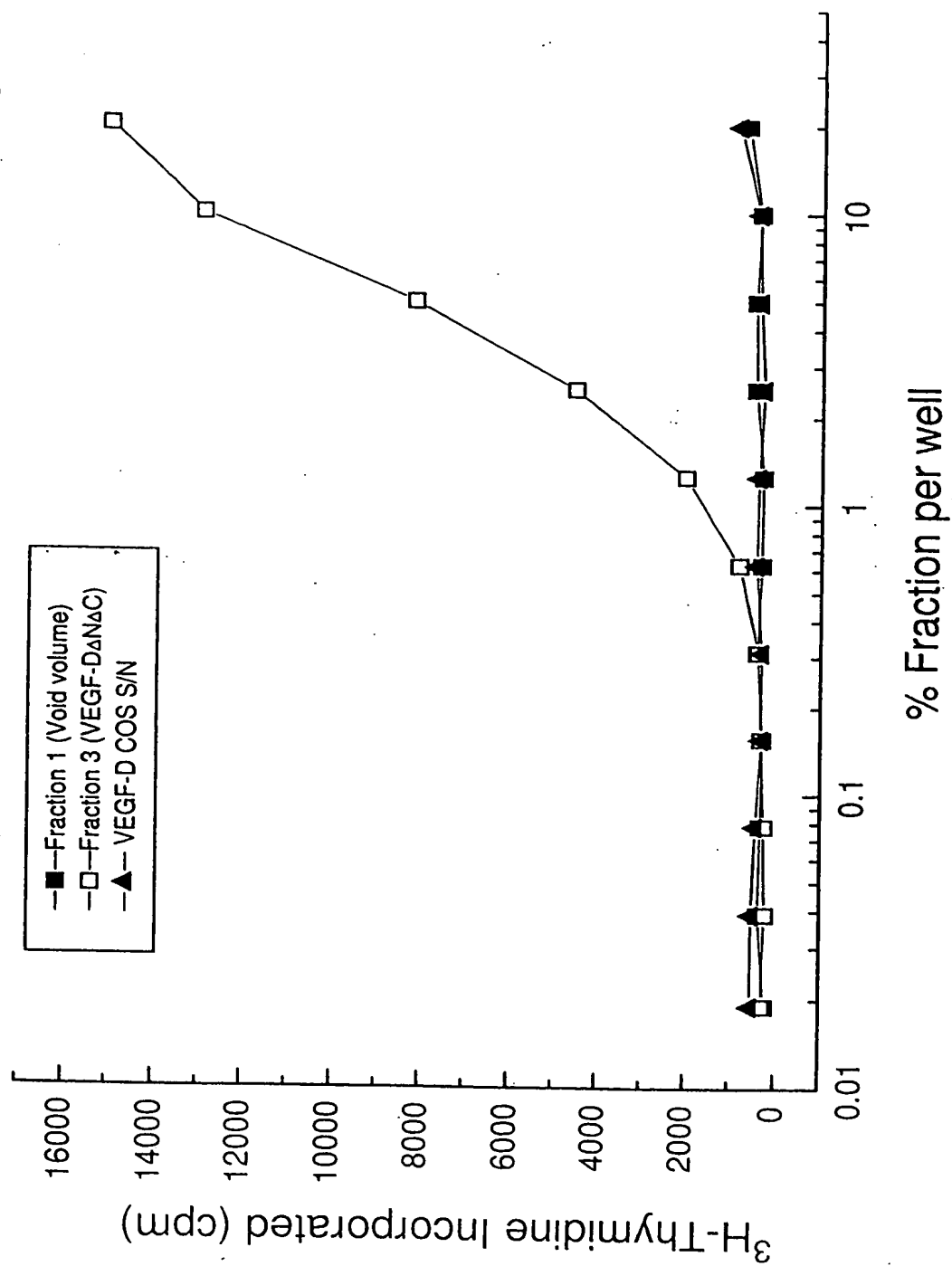


FIG. 12 B

FIG. 13



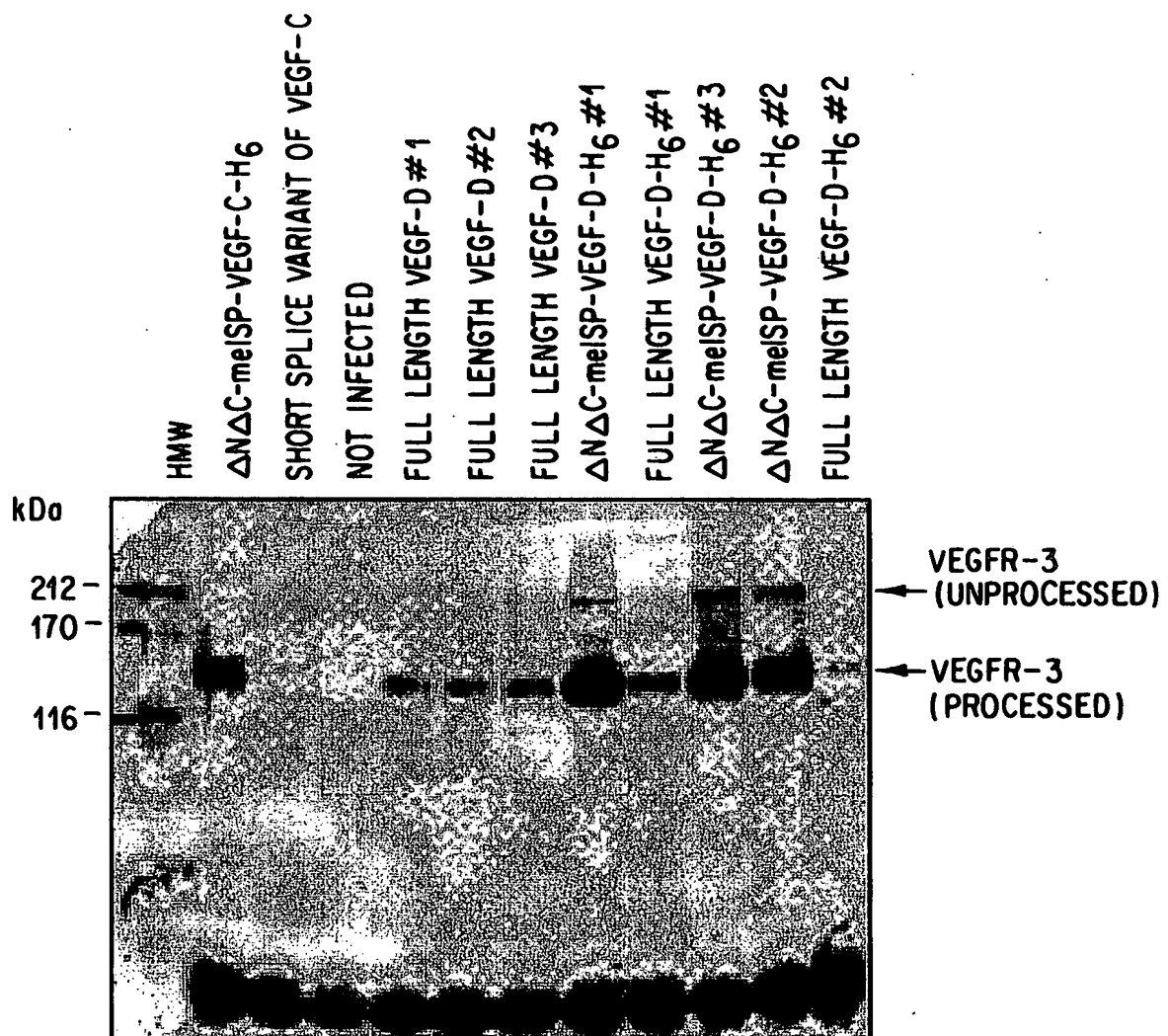


FIG. 14

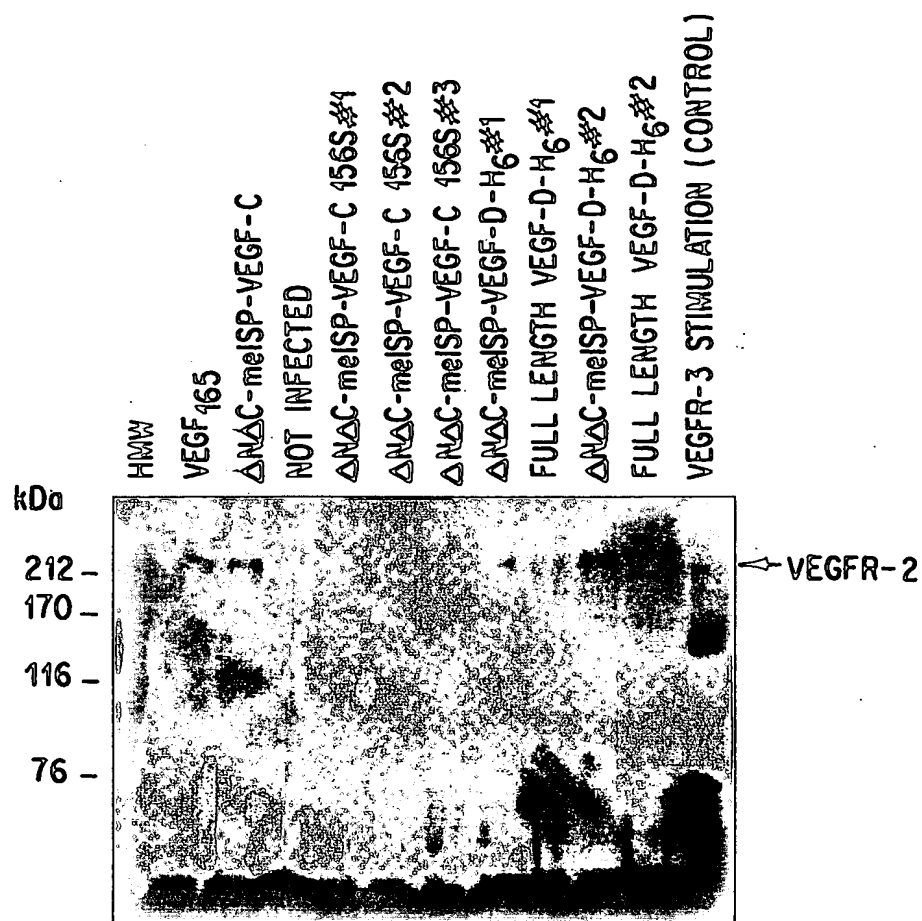


FIG. 15

FIG. 16

